

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An elastomeric stamp for printing a pattern on a substrate with an ink the stamp being at least partially formed from a first material, the stamp comprising a first surface in a first plane, a second surface in a second plane and a third surface extending from the first surface to the second surface, the third surface being permeable to the ink, the first surface comprising a barrier layer being substantially impermeable to the ink.

2. (Withdrawn-Currently Amended) An The elastomeric stamp as claimed in claim 1, wherein the barrier layer is non-covalently bound to the first surface.

3. (Withdrawn-Currently Amended) An The elastomeric stamp as claimed in claim 1, wherein the first barrier layer comprises an inorganic oxide.

4. (Withdrawn-Currently Amended) An The elastomeric stamp as claimed in claim 1, wherein the first barrier layer comprises a polymer material.

5. (Withdrawn-Currently Amended) An The elastomeric stamp as claimed in claim 1, wherein the first barrier layer comprises the first material in a modified form.

6. (Currently Amended) An The elastomeric stamp as claimed in claim 1, wherein the second surface comprises a further barrier layer being substantially impermeable to the ink-ink.

7. (Currently Amended) An The elastomeric stamp as claimed in claim 6, wherein the first surface and the third surface form an

angle between 60-90°.

8. (Withdrawn-Currently Amended) An The elastomeric stamp as claimed in claim 6, wherein the further barrier layer is of the same material as the barrier layer layer.

9. (Withdrawn-Currently Amended) A method for printing an ink in a pattern on a substrate of an electronic device using an elastomeric stamp stamp, the elastomeric stamp being at least partially formed from a first material, the elastomeric stamp comprising a first surface in a first plane, a second surface in a second plane and a third surface extending from the first surface to the second surface surface, the third surface being permeable to the ink ink, the first surface comprising a barrier layer being substantially impermeable to the ink ink, the method comprising the steps acts of:

bringing the elastomeric stamp into contact with a supply of an ink solution;

absorbing the ink solution in the first material;

cleaning at least the barrier layer of the elastomeric stamp
stamp;

drying the elastomeric stamp stamp; and

forming at least a part of the pattern by placing the
elastomeric stamp on the substrate with the barrier layer
contacting the substrate and transferring the ink from the first
material to the substrate via the third surface-surface.

10. (Withdrawn-Currently Amended) A The method as claimed in
claim 9, wherein the step-act of cleaning at least the barrier
layer of the elastomeric stamp comprises rinsing the elastomeric
stamp with a solvent.

11. (Withdrawn-Currently Amended) A method of producing a
patterned elastomeric stamp for printing an ink on a substrate of
an electronic device, the method comprising the steps-acts of:
providing a master having a first surface in a first plane, a
second surface in a second plane and a third surface extending from
the first surface to the second surface-surface;

depositing a first material precursor on said surfaces of the master master;

generating an elastomeric stamp having a first surface in a first plane, a second surface in a second plane and a third surface extending from the first surface to the second surface by transforming the first material precursor to a first material, said surfaces of the elastomeric stamp being permeable to the ink ink;
and

forming a barrier layer on the first surface of the elastomeric stamp the barrier layer being impermeable to the ink ink.

12. (Withdrawn-Currently Amended) A The method as claimed in claim 11, wherein the step act of forming a barrier layer on the first surface of the elastomeric stamp comprises anisotropically depositing a metal on the first surface of the elastomeric stamp stamp.

13. (Withdrawn-Currently Amended) A The method as claimed in

claim 12, further comprising the step-act of oxidizing the barrier layer-layer.

14. (Withdrawn-Currently Amended) A-The method as claimed in claim 11, wherein the step-act of forming a barrier layer on the first surface of the elastomeric stamp comprises forming a layer of polymer material on the first surface of the elastomeric stamp stamp.

15. (Withdrawn-Currently Amended) A-The method as claimed in claim 14, wherein the step-act of forming a layer of a polymer material on the first surface of the elastomeric stamp comprises adhering a polymer material to the first surface of the elastomeric stamp stamp.

16. (Withdrawn-Currently Amended) A-The method as claimed in claim 14, wherein the step-act of forming a layer of a polymer material on the first surface of the elastomeric stamp comprises depositing a precursor of the polymer material on the first surface

of the elastomeric stamp-stamp; and

forming the layer of the polymer material from the precursor.

17. (Withdrawn-Currently Amended) A The method as claimed in claim 16, wherein the step-act of forming the layer of the polymer material from the precursor is preceded by depositing a polymerization initiator on the first surface of the elastomeric stamp-stamp.

18. (Withdrawn-Currently Amended) A The method as claimed in claim 14, further comprising the steps-acts of:

modifying the first surface of the master-master; and
depositing a precursor of the polymer material on the modified first surface of the master-master.

19. (Withdrawn-Currently Amended) A The method as claimed in claim 11, wherein the step-act of forming a layer of a second material on the first surface comprises modifying a layer of the first material at the first surface-surface.

20. (Withdrawn-Currently Amended) A-The method as claimed in claim 11, further comprising the step act of forming a further barrier layer on the second surface of the elastomeric stamp-stamp, the further barrier layer being impermeable to the ink.

21. (Withdrawn-Currently Amended) A-The method as claimed in claim 20, wherein the further barrier layer is formed from a same material as the barrier-layer layer.